

REMARKS

Overview

Claims 1-37, 42, and 50 are pending in this application. Claims 1, 25, 31, and 50 have been amended. Claims 38-41 and 43 and 48-49 have been cancelled. The present response is an earnest effort to place all claims in proper form for immediate allowance. Reconsideration and passage to issuance is therefore respectfully requested.

Issues Under 35 U.S.C. § 103

Claims 1, 3-6, 8-18, 24 and 36 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U. S. Patent No. 5,983,073 to Ditzik in view of U. S. Patent No. 6,021,207 to Puthuff and further in view of U.S. Patent No. 5,933,506 to Aoki et al. These rejections are respectfully traversed.

As the Examiner recognizes, Ditzik does not disclose a computer adapted to receive voice sound information from a short-range transceiver; the computer adapted to send voice sound information to the short-range transceiver, and wherein the hands-free voice communication device unit comprises a plurality of input sensors, and wherein the hands-free voice communications device comprises a digital processor (Office Action, p. 8). The Examiner relies upon Puthuff as teaching a computer adapted to receive voice sound information from a short-range transceiver and the computer adapted to send voice sound information to the short-range transceiver and a hands-free voice communications device comprises a digital processor (Office Action, p. 9) The purported motivation or suggestion to combine these references is that "It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the PCN circuitry taught by Puthuff in the computer of Ditzik and the digital processor taught

by Puthuff in the ear piece of Ditzik for the purposes of enabling remote voice control of said computer and providing optimal hearing of the usable audible frequency range as taught by Puthuff" (Office Action, p. 8).

As the Examiner also recognizes, neither Ditzik nor Puthuff discloses a handsfree communication device comprising a plurality of input sensors (Office Action, p. 9). Thus, the Examiner relies upon Aoki as teaching a hands-free communication device unit that comprises a plurality of input sensors (Office Action, p. 9). The Examiner further indicates "It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the earset of Ditzik in view of Puthuff with the ear piece circuitry of Aoki for the purpose of providing an earset that automatically processes the speech sending signal in accordance with use environments, that have high noise and ambient noise, to send speech of the best tone quality as taught by Aoki" (Office Action, p. 9).

It is respectfully submitted that such a combination is improper as it relies merely upon hindsight reconstruction of the claimed invention and fails to consider the invention as a whole and the prior art as a whole. In particular, none of the prior art references discloses a handsfree voice communication device having "a digital processor operatively connected to the plurality of input sensors." Ditzik has merely one input sensor in its earset and no digital processor in its earset. Puthuff has merely one input sensor in its earset and a sound processor. Aoki's earpiece has two input sensors and no digital processor.

Puthuff's alleged digital processor is not "adapted for receiving input signals from the plurality of input sensors and processing the input signals prior to transmission" as now required by claim 1. In fact, Puthuff expressly teaches away from the Examiner's combination of elements as Puthuff includes a PCN separate from the earpiece. Puthuff's Personal Communications Node

(PCN) performs the function of processing through use of audio digital signal processing, speech filtering, and noise cancellation (See e.g. col. 6, lines 1-12). Puthuff's sound processor, alleged to be a digital processor, is for packetization (See col. 3, lines 31 to col. 4, lines 32) as opposed to processing multiple input signals. Thus, none of the references cited disclose the digital processor as claimed. Therefore, these rejections should be withdrawn.

Claim 2 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U. S. Patent No. 5,983,073 to Ditzik in view of U. S. Patent No. 6,021,207 to Puthuff and further in view of U.S. Patent No. 5,933,506 to Aoki et al., as applied to claim 1 above, and further in view of U. S. Patent No. 5,982,904 to Eghtesadi et al. This rejection is respectfully traversed. The deficiencies of the combination of Ditzik, Puthuff, and Aoki et al. has already been addressed with respect to claim 1, from which claim 2 depends. Eghtesadi et al's headset does not include a digital processor, let alone the digital processor as claimed. Therefore, this rejection must also be withdrawn.

Claims 7 and 50 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U. S. Patent No. 5,983,073 to Ditzik in view of U. S. Patent No. 6,021,207 to Puthuff and further in view of U.S. Patent No. 5,933,506 to Aoki et al. as applied to claim 1 above, and further in view of U. S. Patent No. 5,363,444 to Norris. This rejection is respectfully traversed. With respect to claim 7, the deficiencies of Ditzik, Puthuff, and Aoki et al. have already been discussed with respect to claim 1. Norris's ear microphone does not include a digital processor, let alone the digital processor as claimed. Therefore, this rejection to claim 7 must also be withdrawn. With respect to claim 50, claim 50 has been amended to further recite that the digital processor is "adapted for receiving input signals from the plurality of input sensors and processing the input

signals prior to transmission." Thus, this rejection to claim 50 should be withdrawn for the reasons expressed with respect to claim 1 and claim 7.

Claims 19-21 and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,983,073 to Ditzik in view of U. S. Patent No. 6,021,207 to Puthuff and further in view of U.S. Patent No. 5,933,506 to Aoki et al. as applied to claim 1, 13 above, and further in view of U. S. Patent No. 5,701,515 to Gradeler. This rejection is respectfully traversed. The deficiencies of Ditzik, Puthuff, and Aoki et al. have already been discussed with respect to claim 1. Gradeler does not remedy these deficiencies. Therefore, these rejections must also be withdrawn.

Claims 25-29, 31-35 and 42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U. S. Patent No. 5,983,073 to Ditzik in view of U. S. Patent No. 5,933,506 to Aoki et al. and in further view of U. S. Patent No. 5,363,444 to Norris. This rejection is respectfully traversed. Claim 25 now requires "processing the voice sound information from the plurality of sensors using a processor within the handsfree voice communication unit." None of the cited references disclose this step. Therefore, this rejection to claim 25 should be withdrawn. As claims 26-29 depend from claim 25, these rejections should also be withdrawn. With respect to claim 31, claim 31 now requires "wirelessly sending the bone conduction signal to a computer." None of the cited references disclose this step. Therefore, this rejection to claim 31 should be withdrawn. As claims 32-35 depend from claim 31, these rejections should also be withdrawn.

With respect to claim 42, none of the cited references disclose a handsfree voice communication device having a bone conduction sensor which does not occlude the external auditory canal of a user. The Examiner cites to Figure 4 and col. 5, lines 26-29 of Norris as disclosing an earpiece structure that is sized and shaped so as not to occlude an external auditory

canal (Office Action, p. 26). However, such an interpretation of Norris is simply wrong. In particular, note that Norris discloses that the "housing 11 is configured at one end 19 to fit snugly at the ear canal 15 be frictional contact with the surrounding ear tissue 20 and 21." Such a fit clearly occludes the external auditory canal. This is shown in Figure 4 where the ear canal 15 is clearly occluded. Thus, this rejection to claim 42 must be withdrawn.

Claim 30 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U. S. Patent No. 5,983,073 to Ditzik in view of U.S. Patent No. 5,933,506 to Aoki et al. in further view of U. S. Patent No. 5,363,444 to Norris as applied to claim 25 above, and further in view of U. S. Patent No. 5,913,196 to Talmor et al. This rejection is respectfully traversed. The deficiencies of Ditzik, Aoki et al. and Norris have already been expressed with respect to claim 25, from which claim 30 depends. Talmor et al. does not remedy these deficiencies. Therefore, this rejection to claim 30 must also be withdrawn.

Claim 37 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U. S. Patent No. 5,983,073 to Ditzik in view of U. S. Patent No. 6,021,207 to Puthuff and further in view of U.S. Patent No. 5,933,506 to Aoki et al. applied to claim 1 above, and further in view of U. S. Patent No. 5,943,324 to Ramesh et al. This rejection is respectfully traversed. The deficiencies of Ditzik, Aoki et al. and Norris have already been expressed with respect to claim 1 from which claim 37 depends. Ramesh et al. does not remedy these deficiencies. Therefore, this rejection to claim 37 must also be withdrawn.

Claims 38-39 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U. S. Patent No. 5,983,073 to Ditzik in view of U. S. Patent No. 5,842,122 to Schellinger et al. Claims 38-39 have been cancelled, thereby mooting these rejections.

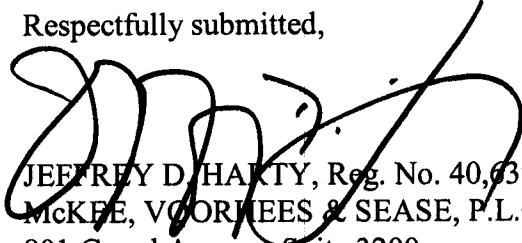
Claims 43, 48-49 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U. S. Patent No. 5,983,073 to Ditzik in view of U. S. Patent No. 5,913,196 to Talmor et al. Claims 43, 48-49 have been cancelled, thereby mooting these rejections.

Conclusion

For the foregoing reasons, it is respectfully submitted that all pending claims are in proper form for immediate allowance. Reconsideration and passage to issuance is therefore requested. This is also a request under the provision of 37 CFR § 1.136(a) to extend the period for filing a response in the above-identified application for two months from December 12, 2006 to February 12, 2007. Applicant is a large entity; therefore, please charge Deposit Account number 26-0084 in the amount of \$450.00 for two months to cover the cost of the extension. Any deficiency or overpayment should be charged or credited to Deposit Account 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,



JEFFREY D. HARKAY, Reg. No. 40,639
McKEE, MCORIEES & SEASE, P.L.C.
801 Grand Avenue, Suite 3200
Des Moines, Iowa 50309-2721
Phone No: (515) 288-3667
Fax No: (515) 288-1338
CUSTOMER NO: 22885

Attorneys of Record

- bjh -